



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/915,850

07/26/2001

Mamoru Higashimura

33828

7188

116

7590

09/10/2004

PEARNE & GORDON LLP
1801 EAST 9TH STREET
SUITE 1200
CLEVELAND, OH 44114-3108

EXAMINER

FLETCHER, JAMES A

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/915,850

Applicant(s)

HIGASHIMURA ET AL.

Examiner

James A. Fletcher

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-17 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 26 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1, 4, 6.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Art Unit: 2616

DETAILED ACTION

1. Please include the new Art Unit 2616 in the caption or heading of any written or facsimile communication submitted after this Office Action because the examiner, who was assigned to Art Unit 2615, will be assigned to new Art Unit 2616. Your cooperation in this matter will assist in the timely processing of the submission and is appreciated by the Office.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Image recording and selective reproducing apparatus.

3. The specification of the disclosure is objected to because of the following informalities: Page 2, line 22 contains the text "each frame is recorded every 3/60 minute..." The examiner believes the text should read --each frame is recorded every 3/60 second...-- as illustrated in figures 7B and 7D. Appropriate correction is required.

Claim Objections

4. **Claim 1** is objected to because of the following informalities: The claim contains the language; "apparatus for recording and reproduction a multiple picture signal..." The examiner believes the claim should read --apparatus for recording and reproducing a multiple picture signal...--

Claim 2 is objected to because of the following informalities: The claim contains the language; "wherein said number of frame to be skipped..." The examiner believes the claim should read --wherein said number of framesu to be skipped...--

Claim 7 is objected to because of the following informalities: The claim contains the language; "skipping of n frame..." The examiner believes the claim should read --skipping of n framesu...--

Claims 8 and 17 are objected to because they lack clarity. When viewed in light of Fig. 3A or 3B, the examiner believes the claims should contain explicit language describing the forward direction of skipping of n+m frames, and explicit description of the m reproduced frames as being the m frames that were forward and reverse skipped. The examiner also believes that with this objection satisfied, the claim would be allowable over prior art. As written in the claims, the values on n and m simply declare a certain number of frames, without explicitly identifying them as is shown in the drawings.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 9-11 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 9 - 11 recite the limitation "the final frame" in line 3 or 4. There is insufficient antecedent basis for this limitation in the claim. The examiner is also unsure of what sequence a final frame would end.

Claim 13 recites the limitation "the remaining number of frames " in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2, 5-7, 12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Navco ("Model 1700 System Controller Operating Instructions").

Regarding claims 1 and 15, Navco discloses an apparatus for recording and reproducing a multiple picture signal obtained by multiplexing picture signals from a plurality of cameras via a frame switcher (MON Chapter, Page 1, "The following Entry Screen allows setting of SEQUENCING MODE, and the setting of the MONITOR SEQUENCE, in any order and combination...Each of these monitor sequences may have an individual DWELL of up to 15 seconds or 15 Frames"), the apparatus having a skip reproduction feature for alternating skipping of n frames and continuous reproduction of m frames [n being a positive integer, and m being a positive integer related to a frame switching pattern] (SRT Chapter, Page 1 "Select the Camera desired to be sorted on the monitor." The value of n would be the number of cameras in the

sequence minus 1, and the value of m would be the number of images recorded from the selected camera, determined by the recording rate and the dwell setting of that particular camera in the MON menu.).

Regarding claim 2, Navco discloses an apparatus wherein the number of frames to be skipped is changed during skip reproduction (CAM Chapter, Page 2 “There is a separate ON/OFF TIMER for each of the sixty four...possible Cameras.” When the timer drops a non-selected camera from the sequence, frames from that camera are no longer available to be skipped, so the number of skipped frames would change. Similarly, if a non-selected camera is added to the sequence by the timer, the images would then add to the number of skipped frames.).

Regarding claim 5, Navco discloses an apparatus wherein at least m frames are continuously reproduced at the beginning of a reproduction image (SRT Chapter, Page 2 “the image will appear to be frozen”).

Regarding claim 6, Navco discloses an apparatus wherein the skip reproduction feature is implemented by a processing including a skip processing for only recognizing the frames (SRT Chapter, Page 1 “Select the Camera desired to be sorted on the monitor”) and a reproduction processing for performing reproduction and output of the frames (SRT Chapter, Page 2, “Select the forward Playback mode on the VCR”).

Regarding claim 7, Navco discloses an apparatus wherein the skip reproduction feature is implemented by a processing including skipping of n frames (SRT Chapter, Page 1 “Select the Camera desired to be sorted on the monitor”) and the subsequent reproduction of m frames (MON Chapter, Page 1, “The following Entry Screen allows

Art Unit: 2616

setting of SEQUENCING MODE, and the setting of the MONITOR SEQUENCE, in any order and combination...Each of these monitor sequences may have an individual DWELL of up to 15 seconds or 15 Frames”).

Regarding claim 12, Navco discloses an apparatus wherein adjustment is made to set the remaining number of frames to a multiple of $n+m$ at start of the skip reproduction feature and when the number of frames n to be skipped is changed during skip reproduction (MON Chapter, Page 1, “The following Entry Screen allows setting of SEQUENCING MODE, and the setting of the MONITOR SEQUENCE, in any order and combination...Each of these monitor sequences may have an individual DWELL of up to 15 seconds or 15 Frames” and SRT Chapter, Page 1 “Select the Camera desired to be sorted on the monitor.” The value of n would be the number of cameras in the sequence minus 1, and the value of m would be the number of images recorded from the selected camera, determined by the recording rate and the dwell setting of that particular camera in the MON menu.).

Regarding claim 17, Navco discloses an image reproducing method as analyzed and discussed in reference to claim 8.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3-4, 8, 10-11, 13-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Navco.

Regarding claim 3, Navco suggests an apparatus wherein the number of frames is changed to $n-d$ [$2 \leq d < n$, d is a positive integer] in case the number of frames is decreased (SRT Chapter, Page 1 "Select the Camera desired to be sorted on the monitor" and CAM Chapter, Page 2 "There is a separate ON/OFF TIMER for each of the sixty four...possible Cameras").

The examiner takes official notice that when the number of frames is decreased from a situation where $n > 4$ to a smaller number, such as $n-2$, the number of frames would then satisfy the claimed equation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Navco to include such equations in their instructions.

Regarding claim 4, Navco suggests but does not specifically disclose an apparatus wherein at least m frames are continuously reproduced at the end of a reconstructed image (SRT Chapter, Page 1 "Select the Camera desired to be sorted on the monitor").

The examiner takes official notice that a device for displaying selected images from a continuous stream of images would obviously repeat the selected image in order to prevent a blank screen display.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Navco to describe a continuous reproduction of the selected image until another image meeting the selection criteria was provided.

Regarding claim 8, Navco suggests an apparatus wherein the skip reproduction feature is implemented by a processing including skipping of a series of $n+m$ frames, reversed skipping of m frames, and reproduction of m frames (SRT Chapter 2, "VCR of the 2600 and 2700 Series example" shows a VCR control allowing reverse [rev] playback while sorting).

While this does not explicitly disclose the operation of a reverse skipping reproduction, the examiner takes official notice that a command for reverse playback is well known to cause reverse playback.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to cause reverse reproduction when the VCR is instructed to provide reverse reproduction from the skip reproduction mode.

Regarding claim 10, the examiner applies the prior art loosely because of the indefiniteness as stated above. Navco suggests but does not specifically disclose an apparatus wherein the reproduction is performed up to the final frame when the difference between the frame just before start of the skipping and the final frame of a reconstructed image is smaller than m frames (SRT Chapter, Page 2, "If the selected camera number was not recorded on the selected tape...the image will appear to be frozen...").

The examiner takes official notice that a device for displaying selected images from a continuous stream of images would obviously repeat the selected image in order to prevent a blank screen display.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Navco to describe a continuous reproduction of the selected image until another image meeting the selection criteria was provided.

Regarding claim 11, Navco teaches but does not specifically disclose an apparatus wherein reversed skipping of a maximum of m frames is performed within the number of skipped frames in the immediately preceding processing, when the final frame of an image is reached during the skipping (SRT Chapter 2, "VCR of the 2600 and 2700 Series example" shows a VCR control allowing reverse "[rev]" playback while sorting).

While this does not explicitly disclose the operation of a reverse skipping reproduction, the examiner takes the examiner takes official notice that a command for reverse playback is well known to cause reverse playback.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to cause reverse reproduction when the VCR is instructed to provide reverse reproduction from the skip reproduction mode.

The examiner takes further official notice that the skipping of m frames is well known in a system presenting only n frames from a sequence of $n+m$ frames.

Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to modify Navco in order to provide a reversed skipping of m frames preceding processing of a final frame to be displayed.

Regarding claim 13, Navco discloses an apparatus wherein adjustment is made to set the remaining number of frames to a multiple of $n+m$ at start of the skip

Art Unit: 2616

reproduction feature (SRT Chapter, Page 1 "Select the Camera desired to be sorted on the monitor") and when the number of frames n to be skipped is changed during skip reproduction (CAM Chapter, Page 2 "There is a separate ON/OFF TIMER for each of the sixty four...possible Cameras").

In the case where the multiple of m is one, Navco clearly meets the features shown in the claim.

Regarding claim 14, Navco suggest an apparatus wherein reproduction is suspended after continuous reproduction of the predetermined m frames when suspension of reproduction is instructed during execution of the skip reproduction feature (SRT Chapter 2, "VCR of the 2600 and 2700 Series example" shows a VCR control allowing stop "[stop]" of the VCR while sorting).

While this does not explicitly disclose the suspension of reproduction when suspension of reproduction is instructed, the examiner takes official notice that a "stop" command is well known to suspend reproduction operation in a playback apparatus.

Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to cause the suspension of reproduction when the VCR is instructed to stop reproduction.

Regarding claim 16, Navco discloses an image reproducing method for skip reproducing a multiple picture signal obtained by multiplexing picture signals from a plurality of cameras via a frame switcher, the image reproducing method comprising the steps of:

- skipping n frames of the multiple picture signal (SRT Chapter, Page 1 “Select the Camera desired to be sorted on the monitor.” The value of n would be the number of cameras in the sequence minus 1, and the value of m would be the number of images recorded from the selected camera, determined by the recording rate and the dwell setting of that particular camera in the MON menu.);
- Navco suggests continuous reproducing m frames of the multiple picture signal (SRT Chapter, Page 1 “Select the Camera desired to be sorted on the monitor”);

The examiner takes official notice that a device for displaying selected images from a continuous stream of images would obviously repeat the selected image in order to prevent a blank screen display.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Navco to describe a continuous reproduction of the selected image until another image meeting the selection criteria was provided.

- and; repeating the skipping and continuous reproducing (SRT Chapter, Page 2 “VCR of the 2600 and 2700 Series example” “fwd” [forward play] command).

Regarding claim 9, Navco suggests an apparatus wherein the reproduction is performed on m frames up to the final frame when the difference between the frame just before start of the skipping and the final frame of a reconstructed image is equal to or

Art Unit: 2616

greater than m frames and smaller than or equal to n+m frames (SRT Chapter, Page 2, "If the selected camera number was not recorded on the selected tape...the image will appear to be frozen...").

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Fletcher whose telephone number is (703) 305-3464. The examiner can normally be reached on 7:45AM - 5:45PM M-Th, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached at (703) 305-4380.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC 20231


or faxed to:

(703) 872-9314 (for Technology Center 2600 only).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

JAF
September 3, 2004


VINCENT BOCCIO
PRIMARY EXAMINER